## **AMENDMENTS TO THE CLAIMS:**

Amend the claims as follows:

1. (Original) A novel compound, characterized in that it comprises a hemoprotein associated with a sequenced block copolymer comprising a hydrophilic segment, that is an oligosaccharide or a polysaccharide, linked to at least one hydrophobic segment of formula

$$\begin{array}{c|c}
X \\
\uparrow \\
CH_2 - C \\
\downarrow \\
\downarrow \\
\downarrow \\
n
\end{array}$$
(1)

in which:

- X represents H or an alkyl, CN or CONHR radical,
- Y represents a COOR', CONHR" or  $C_6H_5$  radical,

with R, R' and R" representing, independently of one another, a hydrogen atom, a linear or branched  $C_1$  to  $C_{20}$  alkyl group, a linear or branched  $C_1$  to  $C_{20}$  alkoxy group, an amino acid radical, a mono- or polyhydroxylated acid radical or a  $C_5$  to  $C_{12}$  aryl or heteroaryl radical, and the forms associated with a gas.

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- 2. (Original) The novel compound as claimed in claim 1, characterized in that the hemoprotein is a normal hemoprotein, such as cytochromes or myoglobins, or a modified hemoprotein, in particular a natural or modified hemoglobin, that is for example bridged, polymerized, mutated or comprises more or less long peptide chains, or else a hemoprotein analogue in which the iron is substituted with another metal, for example with cobalt, magnesium, copper or zinc.
- 3. (Original) The compound as claimed in claim 1, characterized in that the hemoprotein is a normal or modified hemoglobin.
- 4. (Currently Amended) The compound as claimed in <u>claim 1</u> any one of claims 1 to 3, characterized in that, in formula (I), X represents a CN radical.
- 5. (Original) The compound as claimed in claim 4, in which the hydrophobic segment is a poly(alkyl cyanoacrylate).
- 6. (Currently Amended) The compound as claimed in <u>claim 1</u> any one of claims 1 to 5, characterized in that the hydrophilic segment that is saccharide in nature is a natural or synthetic oligosaccharide or polysaccharide, that may or may not be modified, in particular dextran, where appropriate sulfated, or heparin.
- 7. (Currently Amended) The compound as claimed in claim 1 any one of claims

  1 to 3, characterized in that X represents H and Y a phenyl or ester radical.
- 8. (Currently Amended) The compound as claimed in <u>claim 1</u> any one of claims 1 to 7, characterized in that it is provided in the form of particles of 1 nm to 1 mm.

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- 9. (Original) The compound as claimed in claim 8, characterized in that it is provided in the form of nanoparticles.
- 10. (Original) The use of the compound as claimed in claim 9, as a human or animal blood substitute.
- 11. (Original) The use of the compound as claimed in claim 10, as an adjuvant for antitumor compositions or other antitumor means, for example as a radiosensitizing agent.
- 12. (Currently Amended) The use of the compound as claimed in <u>claim 1</u> any one of claims 1 to 3 and 6 to 8, as agent for depolluting gases, such as carbon monoxide or nitric oxide.
- 13. (Currently Amended) A pharmaceutical composition, characterized in that it contains a therapeutically effective amount of at least one compound as claimed in <a href="mailto:claim 1">claim 1</a> any one of claims 1 to 6 or 9, in the form of nanoparticles in combination with a pharmaceutically acceptable vehicle.